FIG. 1

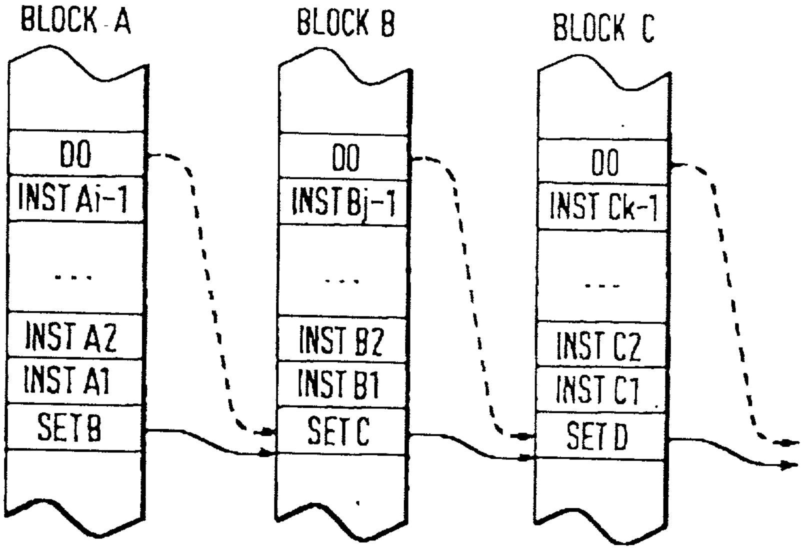
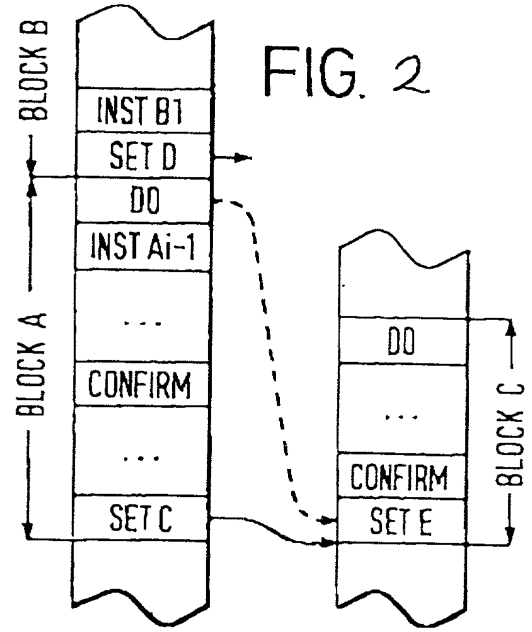

BLOCK A
BLOCK B
BLOCK C
DO
INST Ai-1
...
INST A2
INST A1
SET B
DO
INST Bj-1
...
INST B2
INST B1
SET C
DO
INST Ck-1
...
INST C2
INST C1
SET D

FIG. 2


BLOCK B
INST B1
SET D
DO
INST Ai-1
...
BLOCK A
CONFIRM
...
SET C
DO
...
CONFIRM
SET E
BLOCK C

09977048.101201

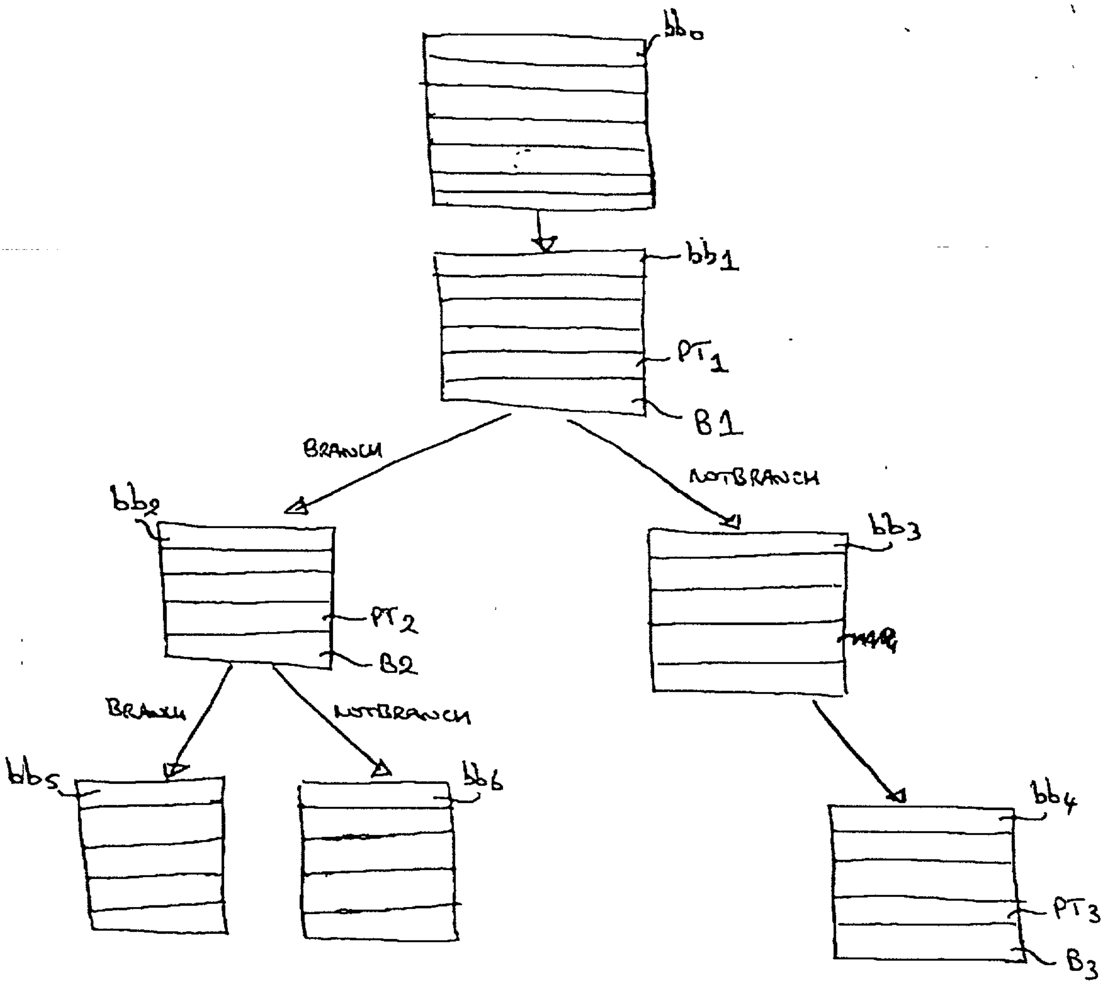


figure 3 A

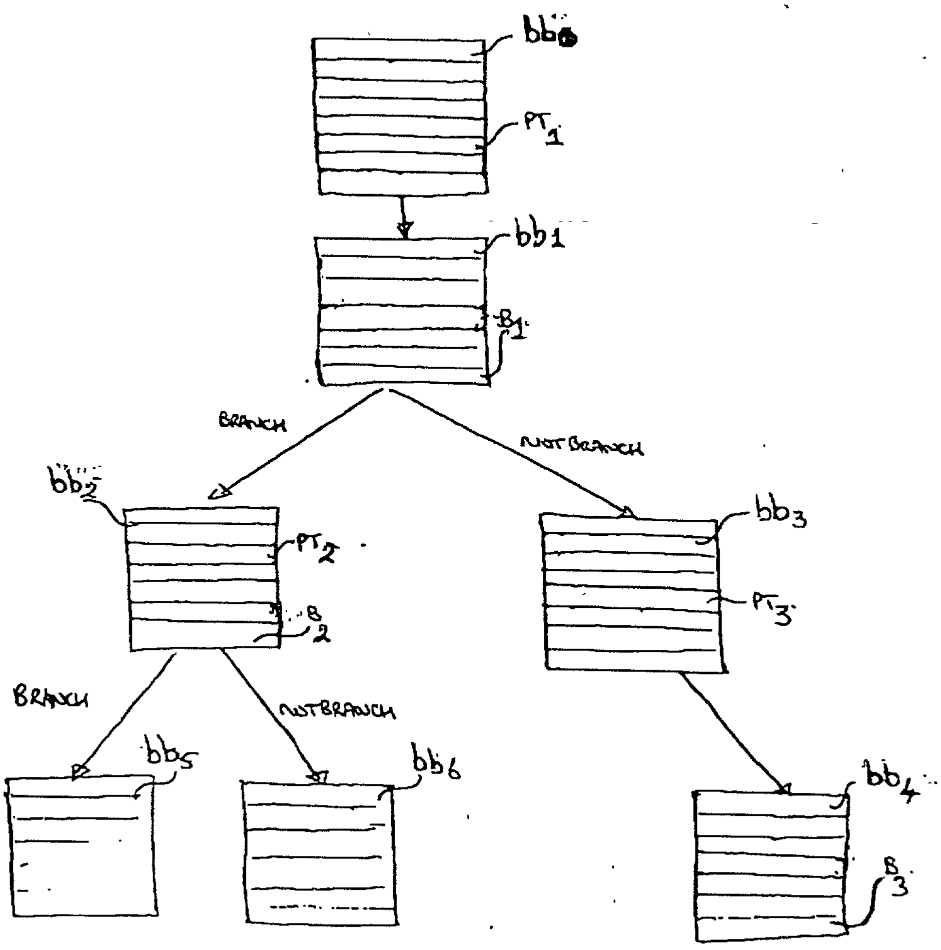


Figure 3A

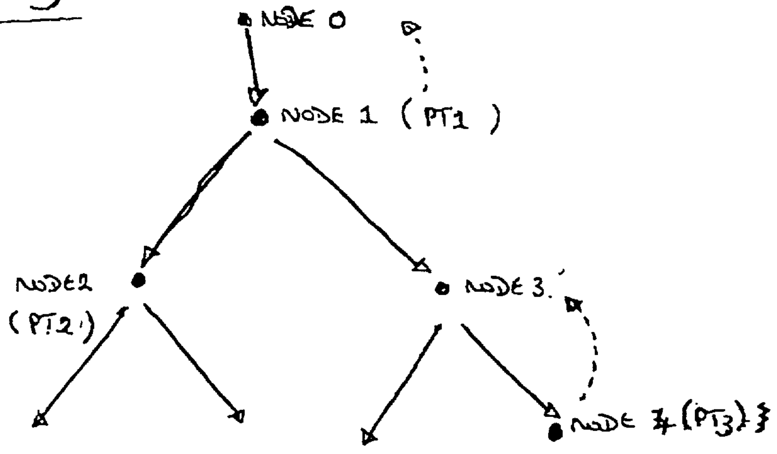


Figure 3B

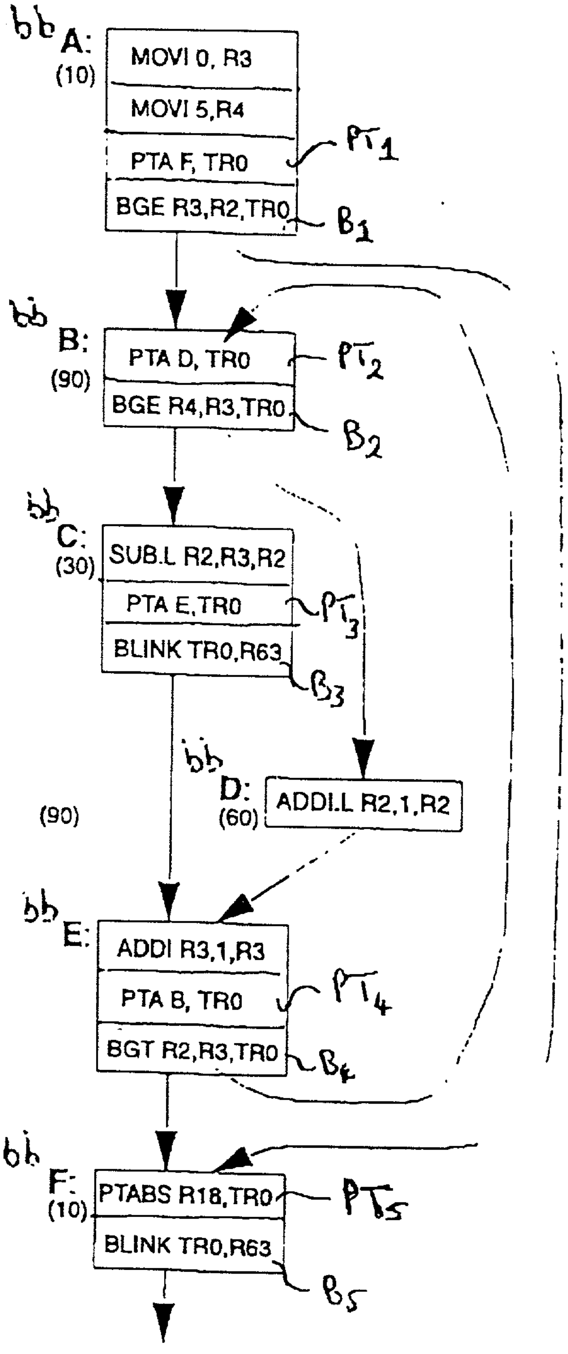


Figure 4A

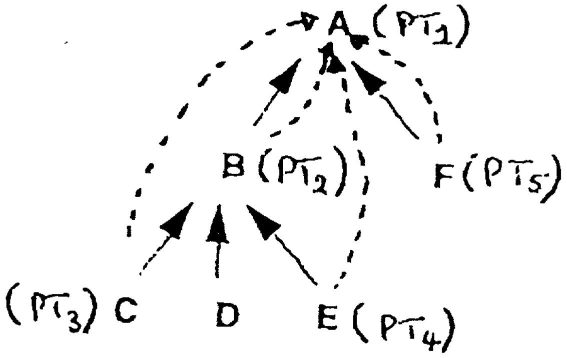


Figure 4B

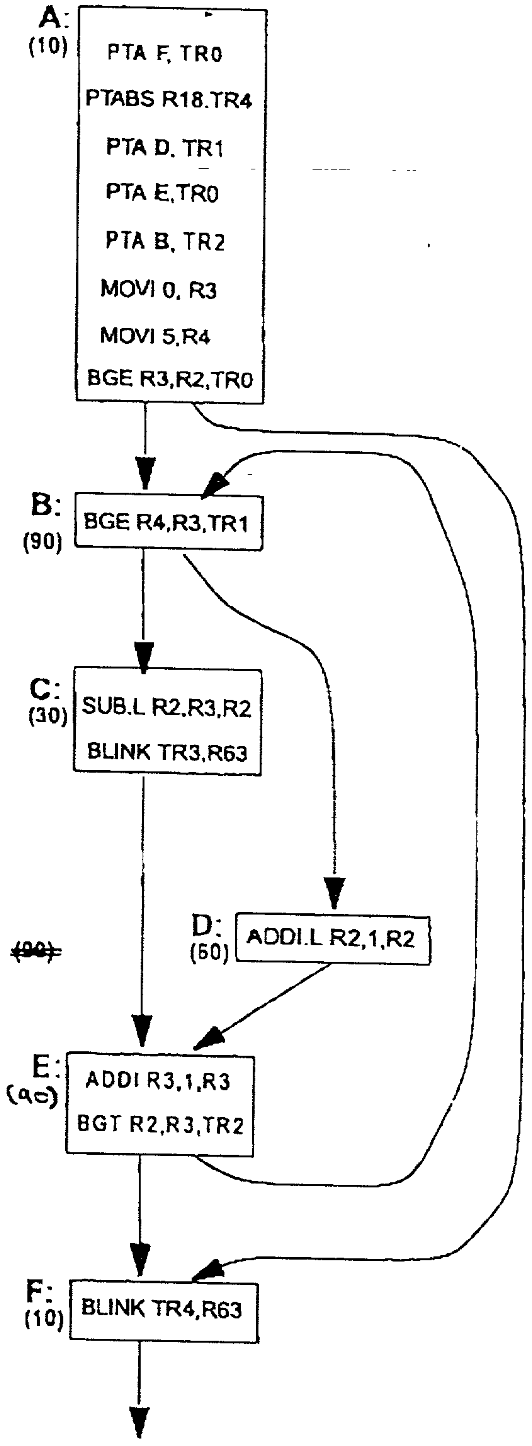

A:
(10)
PTA F, TR0
PTABS R18,TR4
PTA D, TR1
PTA E,TR0
PTA B, TR2
MOVI 0, R3
MOVI 5,R4
BGE R3,R2,TR0
B:
(90)
BGE R4,R3,TR1
C:
(30)
SUB.L R2,R3,R2
BLINK TR3,R63
~~(90)~~
D:
(60)
ADDI.L R2,1,R2
E:
(90)
ADDI R3,1,R3
BGT R2,R3,TR2
F:
(10)
BLINK TR4,R63

Figure 4C

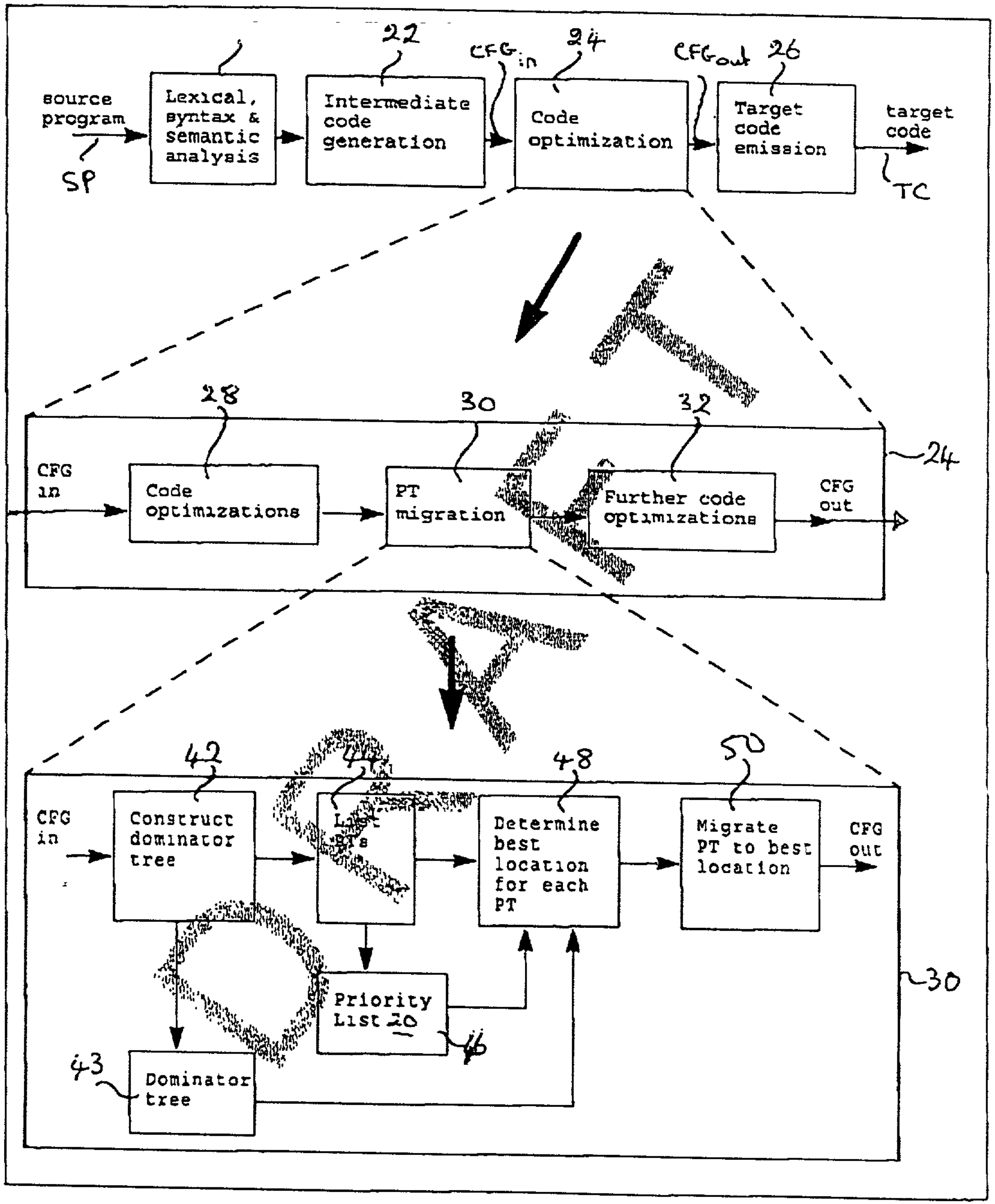

source program
SP
Lexical, syntax & semantic analysis
22
Intermediate code generation
CFG in
24
Code optimization
CFG out
26
Target code emission
target code
TC
28
30
32
24
CFG in
Code optimizations
PT migration
Further code optimizations
CFG out
42
44
48
50
CFG in
Construct dominator tree
List PTs
Determine best location for each PT
Migrate PT to best location
CFG out
Priority List 20
46
43
Dominator tree
30

Figure 5

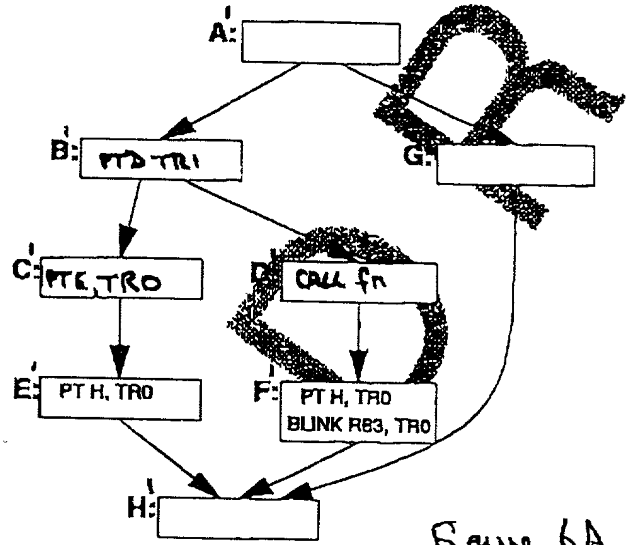


Figure 6A

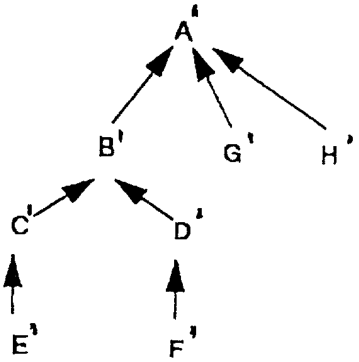


Figure 6B